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INTRODUCTION

In accordance with the City Auditor's 1991-92 Audit Workplan, we completed an audit of the San Jose Municipal Water System's accounts receivable collection process. We conducted this audit in accordance with generally accepted government auditing standards and limited our work to those areas specified in the Scope and Methodology section of this report.

BACKGROUND

The San Jose Municipal Water System (SJMWS) was founded in 1961 and serves about 10 percent of the City of San Jose's (City) population. There are two private water companies--the San Jose Water Company and the Great Oaks Water Company--that provide water service to the rest of San Jose's population. As of August 1992, the SJMWS provided potable water to 16,630 metered customers. Within the SJMWS' boundaries, five service areas exist:

- Alviso and North San Jose - These two service areas encompass approximately 3,378 acres. Land use is predominantly industrial with some residential and commercial development. Water supplied to this area is purchased from the San Francisco Water Department and supplemented with groundwater supplies.
- Coyote - This service area covers over 1,400 acres and is undeveloped. It is zoned as campus industrial in the City's General Plan. With the exception of some groundwater used for irrigation of traffic medians and other landscaped areas, no water service is provided. Developer contributions and assessment districts fund basic water facilities for this area.
- Edenvale - This service area covers approximately 600 acres and is zoned for an industrial park and also falls within the Edenvale Redevelopment Project Area. Water is supplied solely through groundwater.
- Evergreen - This service area covers 9,629 acres, and land use is primarily residential and commercial. This area contains approximately 95 percent of the SJMWS customers and accounts for approximately 75 percent of total water usage. Water is supplied to this area from the Santa Clara Valley Water District and groundwater sources.

The SJMWS is charged with the responsibility of administering the activities and facilities of the City's water system to ensure the adequate delivery of potable

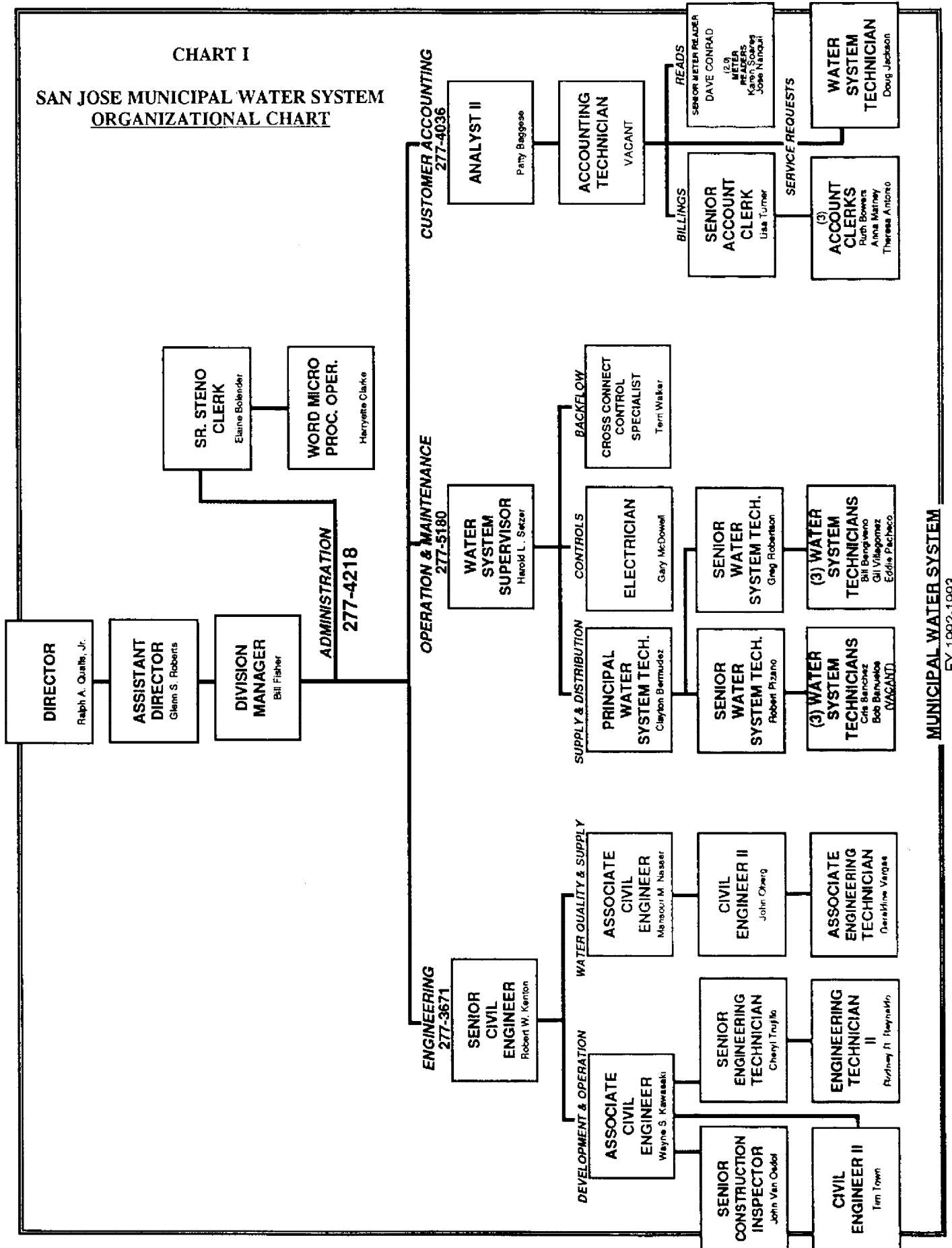
water available for domestic, commercial, industrial, and fire protection requirements. More specifically, the SJMWS is responsible for the following:

- Planning, designing, and constructing Municipal Water System facilities;
- Operating and maintaining Municipal Water System facilities;
- Providing and billing for water service to customers; and
- Administering and operating the customer service and account activities.

The Department of Public Works administers SJMWS' activities. This Division is divided into three major sections of which one, Customer Accounting, is responsible for the SJMWS accounts receivable collection process. (See Chart I for the organizational chart). It should be noted that the Environmental Services Department will soon assume responsibility for the SJMWS as part of the City's reorganization program.

CHART I

**SAN JOSE MUNICIPAL WATER SYSTEM
ORGANIZATIONAL CHART**



MUNICIPAL WATER SYSTEM

FY 1992-1993

From July 1988 through June 1991, the SJMWS generated more than \$19 million in water service revenues and spent more than \$18 million. During the three-year period from 1989 through 1991, SJMWS revenues decreased while SJMWS expenses increased. According to staff, SJMWS revenues declined primarily because of a decrease in the amount of water sold caused by the drought and mandatory water allocations. Expenses increased because the cost of water to the SJMWS increased more than 58 percent from \$210 per acre foot in 1989-90 to \$332 per acre foot in 1991-92 and because the SJMWS hired an employee for its Backflow Prevention Program. The following is a summary of the SJMWS' operating revenues and operating expenses for 1988-89, 1989-90, and 1990-91.

<u>Fiscal Year</u>	<u>SJMWS Operating Revenues</u>	<u>SJMWS Operating Expenses</u>
1988-89	\$ 6,726,884	\$ 5,170,611
1989-90	6,312,688	6,122,580
1990-91	<u>6,507,708</u>	<u>6,941,640</u>
Total	<u>\$19,547,280</u>	<u>\$18,234,831</u>

Major Accomplishments

In Appendix F, the Department of Public Works informs us of its major accomplishments in the Customer Accounting section of the SJMWS. According to the Director of Public Works, noteworthy billing and customer service accomplishments include:

- Expansion of computer hardware capacity to permit each billing cycle to be processed in one billing production rather than dividing a cycle into two billing productions;
- Purchase of a fireproof safe to store the daily backup tapes from the billing computer;
- Installation of a drop box for public convenience;

- Addition of Spanish and Vietnamese language to water shutoff notices;
and
- Initiation of various programs to encourage water conservation because
of continuing drought conditions.

A full text of the Department's memorandum of program accomplishments is shown as Appendix F to this report.

SCOPE AND METHODOLOGY

This is the second in a series of audits on the City-wide accounts receivable collection process. This audit covers the accounts receivable collection process at the San Jose Municipal Water System (SJMWS), which is a division of the Department of Public Works.

Our objectives were

- To determine the existence and adequacy of controls and procedures in the processing of SJMWS accounts receivable; and
- To identify potential sources of additional revenues and potential cost savings relating to the SJMWS accounts receivable collection process.

Our audit included tests of the SJMWS cash receipts ledgers and other records relating to cash handling and the reconciliation, deposit, and recording of revenues. We reviewed written procedures, interviewed SJMWS staff, and observed accounts receivable operations at the SJMWS administrative office at Tuers Road.

In addition, we conducted a survey of other cities' and water utilities' water meter reading processes. Finally, we considered the issue of the possible sale of the SJMWS. We did not do an extensive assessment of the advantages and disadvantages of selling the SJMWS because the City had made a similar assessment in October 1982 and most recently in 1989. We have included in Other Pertinent Information a summary of the City's 1989 assessment of selling the SJMWS.

FINDING I

THE SAN JOSE MUNICIPAL WATER SYSTEM NEEDS TO EVALUATE THE NEW RATE STRUCTURE PUT INTO EFFECT AS OF APRIL 1, 1992

On March 24, 1992, the City Council approved a resolution to increase the San Jose Municipal Water System (SJMWS) rates and increase the monthly service charges which would be effective April 1, 1992. Accordingly, the SJMWS needs to evaluate the effect of the new rates along with the water conservation program to determine whether rates are appropriate for the services being provided.

SJMWS Rates And Charges

Each SJMWS customer's bill consists of two types of charges: Water retail sales rate per one hundred cubic feet (HCF) and a meter service charge. The water retail sales rate is the rate for each HCF used by a customer. The meter service charge is a fixed monthly service charge. This service charge is a readiness-to-serve charge which is applicable to all metered service. The SJMWS uses the size of the meter as a basis for determining the meter rate. In other words, the bigger the meter, the higher the rate, and vice versa.

April 1992 Increase In Meter Rates

In March 1992, the City Council approved an increase in meter rates. The following is a schedule of the City Council-approved increase and the estimated resultant increase in annual revenues.

TABLE I
ESTIMATED INCREASE IN ANNUAL REVENUES
FROM INCREASED METER RATES EFFECTIVE
APRIL 1, 1992

<u>Meter Size</u>	<u>Prior Rate</u>	<u>Approved Rate</u>	<u>Difference</u>	<u>Number Of Meters</u>	<u>Additional Annual Revenues</u>
5/8 x 3/4"	\$ 4.00	\$ 5.85	\$ 1.85	13,744	\$305,116.80
3/4"	5.00	6.00	1.00	1,220	14,640.00
1"	6.50	10.00	3.50	376	15,792.00
1 1/2"	9.00	20.00	11.00	327	43,164.00
2"	11.50	32.00	20.50	877	215,742.00
3"	23.00	59.00	36.00	60	25,920.00
4"	30.00	98.00	68.00	5	4,080.00
6"	48.00	125.00	77.00	18	16,632.00
8"	70.00	175.00	105.00	1	1,260.00
10"	90.00	225.00	135.00	2	3,240.00
				Total	<u>\$645,586.80</u>

**Comparison Of The SJMWS Meter Rate Charge
To The San Jose Water Company
And The Great Oaks Water Company**

As part of our audit we compared the SJMWS' meter rate charges to those of the two private water companies that provide water service to San Jose residents-- the San Jose Water Company and the Great Oaks Water Company. In addition, we compared the annual revenues the SJMWS' meter rate charges generate to the annual revenues the SJMWS would realize if it used the same meter rate charges as the San Jose Water Company or the Great Oaks Water Company. Table II shows the difference in annual revenues using the meter rate charges for the SJMWS, the San Jose Water Company, and the Great Oaks Water Company.

TABLE II

**ANNUAL REVENUES USING
THE SAN JOSE WATER COMPANY,
THE GREAT OAKS WATER COMPANY, AND
THE SJMWS METER RATE CHARGES**

Meter Size	San Jose Water Company	SJMWS	Difference	Great Oaks Water Company	SJMWS	Difference
5/8 x 3/4"	\$1,039,046	\$ 964,829	\$ 74,217	\$ 1,047,293	\$ 964,829	\$ 82,464
3/4"	92,232	87,840	4,392	114,046	87,840	26,206
1"	47,376	45,120	2,256	47,511	45,120	2,391
1 1/2"	103,201	78,480	24,721	67,454	78,480	(11,026)
2"	443,060	336,768	106,292	254,996	336,768	(81,772)
3"	56,808	42,480	14,328	30,686	42,480	(11,794)
4"	7,890	5,880	2,010	3,688	5,880	(2,192)
6"	56,808	27,000	29,808	23,743	27,000	(3,257)
8"	5,050	2,100	2,950	2,228	2,100	128
10"	<u>14,518</u>	<u>5,400</u>	<u>9,118</u>	<u>6,220</u>	<u>5,400</u>	<u>820</u>
	<u>\$1,865,989</u>	<u>\$1,595,897</u>	<u>\$270,092</u>	<u>\$1,597,865</u>	<u>\$1,595,897</u>	<u>\$1,968</u>

As shown in Table II, the SJMWS' meter service charges are significantly lower than the San Jose Water Company's rates. However, the SJMWS' meter service charges are generally comparable to the Great Oaks Water Company's rates.

Impact Of New Charges

The Director of Public Works stated in the memorandum the City Council approved in March 1992 that *"the effect of the water conservation program combined with the new rates should be evaluated next January [1993]. The amount of water sold by the Municipal Water System to its customers will have a critical impact on the annual revenue received."* The memorandum of program accomplishments, included as Appendix F in this report, states, *"It is projected the revenues for San Jose Municipal Water System will increase over \$1,500,000 for FY 1992-93. This increase in revenues will be reflected in an appropriation*

adjustment recommended to the City Council at the mid-year budget review." In our opinion, the SJMWS should perform the above noted analysis of the SJMWS' new water rates and meter charges to determine whether the rates are appropriate for the services being provided.

CONCLUSION

The SJMWS' meter rate charges differ significantly from the amount charged by the San Jose Water Company. However, they are comparable to the meter rate charges the Great Oaks Water Company uses. The SJMWS anticipates that projected revenues will increase approximately \$1,500,000 for the fiscal year 1992-93 as a result of the increase in water rates and meter service charges. The SJMWS should perform an analysis of the new water rates and meter charges to determine whether the rates are appropriate for the services being provided.

RECOMMENDATION

We recommend that the Department of Public Works/San Jose Municipal Water System:

Recommendation #1:

Perform an analysis to determine whether the current SJMWS' rates and charges are appropriate for the services being provided. (Priority 2)

FINDING II

THE SAN JOSE MUNICIPAL WATER SYSTEM WILL SAVE ABOUT \$64,000 PER YEAR BY IMPLEMENTING A BIMONTHLY WATER METER READING SCHEDULE

The San Jose Municipal Water System (SJMWS) reads water meters monthly so that it can bill its customers for their actual monthly water usage. The SJMWS' cost of monthly water meter reading is about \$135,400 annually. Our survey of other water systems indicated that other water systems follow a bimonthly water meter reading schedule. By following a similar water meter reading schedule, the SJMWS can save as much as \$64,350 annually.

The SJMWS Reads Its Customers' Water Meters Monthly

Since it began delivering water, SJMWS has read its customers' water meters on a monthly basis. Of its 16,000-plus customers, almost 95 percent are residential customers.

The SJMWS has three full-time meter readers. Each meter reader is provided with a vehicle to reach various locations in his/her assigned area. To read the water meters, the meter reader uses computerized, hand-held equipment which contains database information about the water customers and their meters. Currently, the total annual cost of reading the customers' water meters monthly is estimated as follows:

Personal (Meter readers' salaries and fringes)	\$123,300
Operation (Fuel and preventive maintenance)	5,400
Depreciation (For vehicles and hand-held readers)	<u>6,700</u>
Estimated total cost	<u>\$135,400</u>

Other Water Systems Follow a Bimonthly Water Meter Reading Schedule

Our survey of 19 cities and water utilities revealed that the majority read residential customers' meters on a bimonthly basis. Of the 19 cities and water utilities surveyed, we noted that 13 read their residential customers' water meters on a bimonthly basis. Our survey further showed that more cities and water utilities read water meters of nonresidential customers on a monthly basis rather than bimonthly. Appendix B summarizes the results of our survey.

Cost Savings From a Bimonthly Water Meter Reading Schedule

By changing its residential water meter reading schedule from monthly to bimonthly, SJMWS could save almost half its monthly costs directly associated with the monthly reading of the customers' water meters. As previously mentioned, the estimated current annual cost to read water meters is \$135,400. Of these costs, only \$6,700 in equipment depreciation is a fixed cost which cannot be reduced. Our estimate of cost savings is shown in Table III.

TABLE III

**ESTIMATE OF COST SAVINGS ASSOCIATED
WITH CHANGING FROM MONTHLY TO BIMONTHLY READINGS
OF RESIDENTIAL CUSTOMERS' WATER METERS**

Personal (Meter readers' salaries and fringes)	\$61,650
Operation (Fuel and preventive maintenance)	<u>2,700</u>
Total estimated cost savings	<u>\$64,350</u>

It should be noted that there are certain disadvantages to converting from a monthly to a bimonthly reading of residential water meters. For example, the SJMWS would have to revise its computerized billing system to calculate an estimated monthly usage for those months meters are not read. In addition, leaks

and damage to water meters might go unnoticed for longer periods of time. Finally, SJMWS would not have monthly data on actual water usage.

In a memorandum to the City Auditor's Office dated January 12, 1993 (Appendix C), the Director of Public Works addressed the issue of monthly meter reading. According to the Director of Public Works, "*Monthly meter reading provides a service to the customers that may not be obvious or apparent unless you look at it in the context of water resource management and customer service.*" In addition, Public Works provided a section of an American Water Works Association (AWWA) survey which showed that of the utilities surveyed, 44 percent read their meters monthly while 56 percent read their meters less frequently than monthly. In our opinion, the SJMWS should revisit the issue of monthly versus bimonthly meter reading with the City Council's Environment Committee.

CONCLUSION

By implementing a bimonthly residential water meter reading schedule, the SJMWS could reduce its meter reading costs by almost 48 percent, or approximately \$64,350.

RECOMMENDATION

We recommend that the Department of Public Works/San Jose Municipal Water System:

Recommendation #2:

Revisit the issue of a bimonthly residential water meter reading schedule with the City Council's Environment Committee. (Priority 2)

FINDING III

THE SAN JOSE MUNICIPAL WATER SYSTEM CAN IMPROVE ITS EFFICIENCY BY FULLY UTILIZING ITS COMPUTER RESOURCES

The San Jose Municipal Water System (SJMWS) uses its own computerized water billing system and the City of San Jose's (City) Financial Management System (FMS) in accounting for its accounts receivable. Our review of the SJMWS accounts receivable disclosed that the SJMWS has not fully utilized the capabilities of its computer resources. Specifically, we noted that the SJMWS manually (1) sorts customer invoices and (2) inputs daily transactions from its water billing system into the FMS. As a result, the SJMWS uses its staff resources for time-consuming work that its computer system and the City's FMS can perform more efficiently. The SJMWS can improve its efficiency and save staff time by (1) printing customer invoices sorted by customer name and address and (2) developing an automated interface between its water billing system and FMS.

The SJMWS Manually Sorts Customer Invoices

Each month the SJMWS reads and records its customers' water meters using Versaterm, a hand-held, computerized reader which contains a water customer database. After reading and recording the meters, the SJMWS downloads the meter readings into a minicomputer which processes the data and generates the SJMWS billing reports and customer invoices.

Prior to forwarding the invoices to the mailroom, SJMWS staff (1) separates the invoices, (2) checks for discrepancies, such as credit balances, and (3) sorts the invoices to ensure that the invoices going to the same address are grouped together before they are mailed. According to SJMWS staff, one account clerk takes about two to three hours a week to complete this manual process.

The City entered into an agreement with Creative Computer Solutions, Inc., (CCS) on April 18, 1986, to *"provide an automated data processing system recognized by CITY to be of substantial benefit in providing for the automatic processing of bills and for accountability for the use of the Municipal Water Service."* Under this agreement, one of the benefits the CCS computer system can provide for the SJMWS' billing function is the ability to *"access the billing consumer data base by customer name, service location, account number or meter number."* The SJMWS can use this computer capability to print customer invoices sorted by customer name and address. In our opinion, by availing itself of this capability, the SJMWS can save annually 100 to 150 hours of employee time in sorting customer invoices.

**The SJMWS Can Improve Its Efficiency And Save Staff Time
By Developing An Automated Interface
Between Its Water Billing System And FMS**

The SJMWS manually posts water billings based on the summary data of the final billing report. Posting is done by inputting the information into the FMS computer terminal located at the SJMWS administrative office. Similarly, the SJMWS manually posts the summary of the cash receipts transactions into the FMS terminal after it has completed the daily cash reconciliation. These manual inputs are made because the SJMWS' water billing system does not automatically interface with FMS. Both types of manual input are subject to supervisory review and approval in the Department of Public Works.

Manual input of transactions could be eliminated if the SJMWS' water billing system could interface automatically with FMS. Automatic interface with FMS would keep the FMS accounts receivable general ledger balances on a current basis and facilitate reconciliation of these balances with the SJMWS accounts

receivable details. Finally, the direct interface between the water billing system and FMS would eliminate procedural steps required under the manual input system. In our opinion, SJMWS should coordinate with CCS and the Information Systems Department (ISD) to develop an automatic interface between the water billing system and FMS. By so doing, the SJMWS' water billing system will be more efficient and the staff time currently used in unnecessary manual processes can be redirected to other activities.

CONCLUSION

The SJMWS can significantly improve its water billing system by using the system's capabilities to perform certain tasks automatically that are currently being done manually. Specifically, the SJMWS should have the computer sort invoices by customer name and address. Also, the SJMWS should coordinate with CCS and ISD to develop an automatic interface between the water billing system and the City's FMS. By using the water billing system's capabilities and having it automatically interfaced with the FMS, the SJMWS can save staff resources and improve the efficiency of its water billing system.

RECOMMENDATIONS

We recommend that the Department of Public Works/San Jose Municipal Water System:

Recommendation #3:

Program its computer to print customer invoices sorted by customer name and address. (Priority 2)

Recommendation #4:

Coordinate with Creative Computer Solutions, Inc., and ISD to develop an automated interface between its water billing system and FMS. (Priority 2)

FINDING IV

THE ADMINISTRATION OF THE SAN JOSE MUNICIPAL WATER SYSTEM'S ACCOUNTS RECEIVABLE CAN BE IMPROVED

The San Jose Municipal Water System (SJMWS) coordinates with the Accounts Receivable Section (ARS) of the Finance Department/Treasury Division in administering SJMWS accounts receivable and pursuing SJMWS delinquent accounts. Our review of the administration of SJMWS accounts receivable disclosed that

- Until recently, neither the SJMWS nor the ARS in the Finance Department prepared an accounts receivable aging schedule for monitoring collections;
- Informal procedures for identifying and pursuing delinquent accounts need to be updated, formally adopted, and performed; and
- Established procedures for purging accounts receivable ledgers of uncollectible accounts are not being followed.

The SJMWS and ARS in the Finance Department can improve the administration of SJMWS accounts receivable by (1) preparing an accounts receivable aging schedule for monitoring collections; (2) updating, formally adopting, and performing their informal procedures for identifying and pursuing delinquent accounts; and (3) following established procedures for purging accounts receivable ledgers of uncollectible accounts.

The SJMWS Accounts Receivable Process

The SJMWS generates the final monthly billing reports for all water customers it serves in various service areas. These reports are summarized and input into the Financial Management System (FMS) computer terminal to update

the FMS general ledger accounts receivable. Generally, because of the four-cycle billing system, SJMWS inputs the summary billing data once a week during each month.

At the end of each month, the SJMWS prepares closing bills for all water customers whose water services have been turned off due to:

- Type I - Customers requesting that their water service be turned off because they are moving; or
- Type II - Customers failing to pay their water bills after having been served delinquent notices.

The SJMWS receives customer payments either through the mail, at a drop box in front of its administrative office, or over the counter. The SJMWS summarizes and reconciles its daily receipts and inputs the summary data through its FMS terminal to update the general ledger accounts receivable. The ARS in the Finance Department follows up on the Type II closing bills for the SJMWS.

Until Recently, Neither The SJMWS Nor The ARS In The Finance Department Prepared An Accounts Receivable Aging Schedule For Monitoring Collections

Our review revealed that until July 1992 neither the Finance Department's ARS nor the SJMWS prepared a monthly aging schedule which summarized water bills according to how long they have been delinquent. Based on the SJMWS' current collection process for delinquent bills, the only accounts receivable aging that needs to be prepared is an aging on the closing water bills. Without an aging schedule on the closing water bills, the ARS cannot readily determine how long customers have been delinquent. Beginning in July 1992, ARS started preparing an aging schedule for SJMWS' closing water bills (See Appendix D). In addition, beginning in April 1990, the collection agency the City uses to pursue delinquent

accounts (Collection Bureau of San Jose) started providing a monthly statement for SJMWS' accounts receivable that shows which accounts (1) have been fully or partially collected, (2) have been recommended for cancellation, or (3) have still not been collected.

As noted in Appendix D, the July 31, 1992, accounts receivable balance on closing water bills was \$38,670.78, with \$36,615.88 of those accounts being 90 days or more past due. On October 15, 1992, the ARS prepared another aging schedule which showed a total accounts receivable balance on closing water bills of only \$12,374.09, with \$12,292.92 of those accounts being 90 days or more past due. Thus, in only two and one-half months, the ARS, by preparing aging schedules for closing water bills and/or collecting or writing off accounts, reduced the amount of total accounts receivable on closing water bills and accounts 90 days or more past due by approximately two-thirds. In our opinion, the ARS should continue preparing an aging schedule for SJMWS' closing water bills in order to monitor account delinquencies in order to either take appropriate collection efforts, or write off uncollectible accounts.

**Informal Procedures For Identifying And Pursuing
Delinquent Accounts Need To Be Updated, Formally Adopted, And Performed**

As stated earlier, at the end of each month, the SJMWS prepares closing bills for all water customers whose water services have been turned off because of customer request or failure to pay. However, in those instances of customer failure to pay, the SJMWS usually waits no less than 111 days before it prepares a closing bill. A typical waiting period for preparing a closing bill in cases of customer failure to pay is shown in Table IV.

TABLE IV

ESTIMATED WAITING PERIOD
FOR CUSTOMER FAILURE TO PAY CLOSING BILLS

<u>Description</u>	<u>Number of Days</u>
Normal billing term	30
Allowed past due days (delinquent notices mailed)	60
7 days after past due, door-hanger notice	7
7 days after door-hanger notice, turn off service	7
7 days after turn-off service, meter lock check	<u>7</u>
Total	<u>111</u>

According to draft ARS procedures, once a month the SJMWS will turn over its closing bills to ARS for collection or for write-off. The ARS' informal policy is to write off the less-than \$25 closing bills after initial follow-up and perform further collection follow-up on those accounts of \$25 or more. ARS collection follow-up includes making telephone calls, mailing letters, filing claims in small claims court, using Collection Bureau of San Jose, and involving the City Attorney's Office. In our opinion, the ARS should update, formally adopt, and perform their informal procedures for identifying and pursuing delinquent SJMWS customer accounts.

Established Procedures For Purging Accounts Receivable Ledgers Of Uncollectible Accounts Should Be Followed

In Section 4.1.3.5 of the Finance Administrative Manual, the ARS has established procedures to purge delinquent accounts receivable files. At six-month intervals, the ARS can purge accounts receivable files *"of accounts previously assigned to the Collection Bureau and are deemed uncollectible or are for amounts less than the cost of collection to the City as set by Policy and*

Procedures." At three-month intervals, the ARS can purge accounts receivable files *"of accounts which are deemed uncollectible by Finance Department and/or the City Attorney's Office."* Only the Finance Department and the City Council can approve the writing off of accounts receivable. The Director of Finance must approve the writing off of invoices with amounts of \$3,000 and less, while the City Council must approve the writing off of invoices with amounts exceeding \$3,000. However, our review showed that as of July 1992 these procedures have not been followed. Our review of delinquent water bills revealed that the ARS has not purged its file of invoices and documents relating to customers with long outstanding accounts. For example, on the SJMWS' July 31, 1992, aging schedule, there is an invoice dated November 1, 1988, for \$784.49 that is neither marked as one of the receivables that is assigned to the Collection Bureau of San Jose nor as an account to be written off. In our opinion, the ARS should comply with the write-off procedures in section 4.1.3.5 of the Finance Administrative Manual.

CONCLUSION

The SJMWS and the ARS in the Finance Department need to improve the administration of the SJMWS accounts receivable by (1) regularly preparing an accounts receivable aging schedule on closing water bills for monitoring collections; (2) updating, formally adopting, and performing their informal procedures for identifying and pursuing delinquent accounts; and (3) following established procedures for purging accounts receivable ledgers of uncollectible accounts.

RECOMMENDATIONS

We recommend that the Department of Public Works/San Jose Municipal Water System and the Finance Department/Treasury Division:

Recommendation #5:

Continue the recently adopted practice of monitoring SJMWS closing water bills with the use of an accounts receivable aging schedule. (Priority 3)

Recommendation #6:

Update, formally adopt, and perform current informal procedures for identifying and pursuing delinquent SJMWS accounts receivable. (Priority 3)

Recommendation #7:

Comply with established procedures for purging accounts receivable ledgers of uncollectible SJMWS customer accounts receivable. (Priority 3)

FINDING V

IMPROVING THE SAN JOSE MUNICIPAL WATER SYSTEM CASH HANDLING PROCEDURES WILL ENHANCE ACCOUNTABILITY OVER REVENUES

The San Jose Municipal Water System (SJMWS) receives revenues through the mail, at a drop box in front of its administrative office, and over the counter at its administrative office. Our review of the SJMWS' cash handling process disclosed that certain procedures are inadequate to ensure that revenues are safeguarded and that the cash handling process is efficient and effective. Specifically, we noted that the SJMWS

- Does not deposit its receipts on the same day they are received;
- Keeps its office safe unlocked during the day and does not change the safe combination periodically;
- Does not stamp an endorsement on checks in a timely manner;
- Uses a cash receipts form that is neither pre-numbered nor dated;
- Does not adequately segregate its cash handling and recording duties; and
- Needs to complete its written procedures.

The SJMWS can enhance the accountability over its revenues by coordinating with Treasury Division (Treasury) of the Finance Department to include in its 1993 banking services bid specifications either courier pickup at 3:00 p.m. or later or lockbox service to the SJMWS; locking the office safe at all times and opening it only for authorized purposes; limiting access to a limited number of employees; periodically changing the safe combination; requiring individuals to sign a log before opening the safe; stamping an endorsement on checks in a more timely manner; pre-numbering its cash receipts form and

periodically accounting for its cash receipts form usage; segregating the cash handling from cash recording duties; and completing its written procedures.

Controls Over Cash Receipts

Cash is the asset most susceptible to misappropriation. Accordingly, the SJMWS needs to establish adequate controls to ensure that daily cash receipts are safeguarded at all times. Currently, three account clerks receive customer payments through the mail, from the drop box, and over the counter, and the senior account clerk balances the cash register receipts on a daily basis. In addition, the account clerks (1) separate check payments into full and partial payments, (2) batch the checks and the related payment stubs, (3) balance their totals, and (4) input the payments into the accounts receivable system. The senior account clerk, before completing a deposit slip, prepares the day's collection worksheet and reconciles it to the batch tapes, including the cash register tape, cash posting receipts report, and cash posting receipt recap. A supervisor reviews the daily cash reconciliation. The senior account clerk deposits the day's collection the following workday. However, as of December 1, 1992, a courier service is picking up the cash receipts on the following day.

Test Of Cash Handling Procedures

We tested the SJMWS' procedures over cash receipts for adequacy. Specifically, we reviewed the cash register tapes the SJMWS submits to the Finance Department and the daily cash reconciliations the SJMWS prepares prior to preparing a deposit slip.

- *Test of the cash register tapes.* All cash receipt transaction numbers were accounted for properly. However, we noted that neither the supervisor

nor a designee ensures the continuity of cash register transaction numbers by comparing the starting transaction number for one day with the previous day's ending transaction number. Furthermore, we did not find any documentation or evidence of approval for any of the void amounts on the cash register tapes. To improve control over void amounts, the cashier should make a notation explaining why the rung-in amount should be voided, and his or her supervisor should review and approve the notation.

- Test of the daily cash reconciliations. Our test revealed that an error was made in preparing one deposit slip. Specifically, the deposit slip was overstated by \$734. According to the SJMWS staff, this error went undetected because the senior account clerk, who usually prepares the daily cash reconciliation, was absent. As a result, the supervisor who usually reviews the daily cash reconciliation had to prepare the reconciliation instead. Consequently, no one reviewed the daily cash reconciliation that the supervisor prepared, and the \$734 error went undetected. In our opinion, SJMWS' procedures should specify which of its staff should perform critical reviews and reconciliations in the absence of the staff regularly assigned to do such tasks.

**The SJMWS Does Not Deposit Its Receipts
On The Same Day They Are Received**

The SJMWS receives payments from its water customers daily. As previously mentioned, these payments are batched, balanced, input into the accounts receivable system, and agreed to the cash receipt posting report and recap and the collection worksheet before the SJMWS prepares a deposit slip. The day's collections (checks and cash) are placed in a safe overnight and deposited the following workday. Basic internal controls require that cash receipts be deposited intact on the same day they are received in order to reduce the risk of cash receipts being stolen at night. For the month we examined, the SJMWS' daily receipts ranged from \$18,229 to \$166,497 and averaged approximately \$53,000. However,

given the SJMWS' current staffing and cash handling practices, depositing receipts on the same day as received is not feasible. For example, currently the bank courier will not pick up the SJMWS' deposits after 1:30 p.m., and because the same four account clerks have to process both mail and drop box receipts, receive over-the-counter payments, and answer the telephone, the SJMWS cannot have same day receipts ready for deposit by 1:30 p.m. In addition, establishing a check amount threshold, such as \$10,000, for same day deposit will not alleviate the overnight storage of receipts situation as the vast majority of SJMWS daily receipts are made up of small dollar amount checks.

According to Treasury, the City will be going out to bid for banking services in 1993. In our opinion, the SJMWS should coordinate with Treasury to include in its bid specifications that the bank provide the SJMWS with either a courier pickup at 3:00 p.m. or later or provide the SJMWS with a lockbox service. In either case, the SJMWS will be able to process and deposit its customers' payments on the same day they are received.

**The SJMWS Keeps Its Office Safe Unlocked
During The Day And Does Not Change
The Safe Combination Periodically**

As part of its regular cash handling procedures, the SJMWS keeps its day's cash receipts in an office safe and deposits them the following workday. During the day, the SJMWS' office safe is not kept locked. According to staff, it has always been the SJMWS' practice to not lock the safe during the day. At least five SJMWS employees know the safe combination, and the SJMWS has not changed the combination to its safe since January 1992. The SJMWS cannot achieve adequate internal control unless it keeps its safe locked and opens it only for authorized purposes, limits access to the safe to a limited number of employees,

changes its safe combination periodically, and requires individuals to sign a log before opening the safe.

**The SJMWS Does Not Stamp An Endorsement
On Checks In A Timely Manner**

Everyday the SJMWS processes check payments received through the mail, from the drop box, and over the counter. After the check payments and payment stubs have been batched, balanced, and input into the accounts receivable system, the senior account clerk prepares the daily cash reconciliation which a supervisor reviews for accuracy. After the cash reconciliation is completed, one of the account clerks stamps an endorsement on the back of each check using an electronic endorsing machine. Endorsement of each check at this late stage of the cash handling process does not offer adequate control. According to Treasury, they endorse checks immediately after they have batched and balanced the payments. In our opinion, the SJMWS staff should adopt Treasury's procedures in order to provide for a stronger internal control over the checks.

**The SJMWS Uses A Cash Receipts Form
That Is Neither Pre-numbered Nor Dated**

Everyday the SJMWS uses, on the average, 15 cash receipt forms that are neither pre-numbered nor dated. These forms are used to receive

- Payments for deposit and reconnection fees,
- Payments for water bills with no payment stubs, and
- Payments for returned checks.

In our opinion, to safeguard and properly account for those revenues recorded on cash receipt forms, the SJMWS needs to use pre-numbered cash receipt forms and periodically account for those forms.

**The SJMWS Does Not Adequately Segregate
Its Cash Handling And Recording Duties**

As stated earlier, the SJMWS uses three account clerks and a senior account clerk to handle cash and record cash receipts. The account clerks receive, batch, and input into the computer system mail, drop box, and over-the-counter payments. The senior account clerk then reconciles the checks, payment stubs, batches, and computer entries and approves the batches. The account clerk then enters them into the computer to credit customer accounts for the payments made. In addition, the senior account clerk prepares the deposit slip and the Financial Management System (FMS) Cash Collection Edit entry, which a supervisor reviews and approves after reconciling any backup documentation totals. In the absence of the senior account clerk, the supervisor performs the senior account clerk's duties, and if one of the account clerks is absent, the senior account clerk performs some of the other account clerk's cash handling duties. This procedure for cash handling and recording cash transactions does not conform with good internal control principles.

In the book Auditing, the following statement is made with regards to cash receipt procedures: *“Throughout the data processing, the custody of cash and the recordkeeping functions should be kept separate.”* The SJMWS' current process does not keep the custody of cash and the recordkeeping functions separate. Specifically, the following functions are not compatible:

- The account clerks receiving and recording mail, drop box, and over the-counter payments;

- The senior account clerk balancing the cash register receipts, preparing daily cash reconciliations, posting payments to credit customers' accounts, and depositing the day's collections;
- The senior account clerk taking over the duties of an account clerk when the account clerk is absent; and
- The staff analyst, who usually reviews the daily cash reconciliation, actually preparing the daily cash reconciliation when the senior account clerk is absent.

In our opinion, the SJMWS needs to improve the segregation of its cash custody, recording, depositing, and reconciliation duties, with emphasis on segregating duties when employees are absent. Specifically, the SJMWS should not allow the same employee to receive cash payments, prepare bank deposits, and post customer accounts.

The SJMWS Needs To Complete Its Written Procedures

The SJMWS' written procedures for the accounts receivable collection process are in draft form and not complete. Our review of the draft procedures revealed that SJMWS needs to finalize and complete its written procedures. The publication *Assessing Internal Controls in Performance Audits* suggests asking the following question when assessing internal controls: “*Have policies and procedures been systematically documented, including policies and procedures manuals or guides, personnel manuals, organization charts, flowcharts, or other written descriptions?*” Specifically, the SJMWS needs to finalize additional written procedures for the following major procedural steps:

- *New Installations*
 - Procedures for receiving fees for new installations.
- *Customer Deposits*
 - Procedures for receiving customer deposits for re-installations of water service.
- *Payments*
 - Procedures for the staff analyst's review of the daily reconciliation, including the signing of the FMS Edit List; and
 - Procedures for endorsing checks in a timely manner.
- *Delinquent Accounts*
 - Procedures for controls over delinquent accounts, starting with the first month the account becomes delinquent.

In our opinion, the SJMWS should finalize and complete its written procedures for the accounts receivable collection process.

CONCLUSION

SJMWS needs to improve its cash handling procedures in order to enhance its ability to safeguard and account for all of its revenues efficiently and effectively. Specifically, the SJMWS should coordinate with Treasury Division of the Finance Department to include in its 1993 banking services bid specifications either courier pickup at 3:00 p.m. or later or lockbox service to the SJMWS; keep the office safe locked during the day and change the safe combination periodically; limit access to a limited number of employees and require them to sign a log before opening the safe; stamp an endorsement on checks immediately after the checks have been batched and balanced; use a pre-numbered cash receipts form; and

segregate its cash handling and cash recording duties. Finally, the SJMWS needs to finalize and complete its written procedures over its accounts receivable collection process.

RECOMMENDATIONS

We recommend that the Department of Public Works/San Jose Municipal Water System:

Recommendation #8:

Improve its cash register procedures by requiring the Accounts Receivable supervisor or designee to

- Ensure the continuity of cash register transaction numbers by comparing the starting transaction number for one day with the previous day's ending number, and
- Review and approve voided cash register transactions by approving any cashier notations explaining why the transactions are voided.

(Priority 3)

Recommendation #9:

Designate in its written procedures which backup staff should perform critical reviews and reconciliations in the absence of the regular staff.

(Priority 3)

Recommendation #10:

Keep the office safe locked during the day and open it only for authorized purposes. (Priority 2)

Recommendation #11:

Change the safe combination periodically, restrict the new combination to only those employees who have a critical need to know, and require individuals to sign a log when opening the safe. (Priority 2)

Recommendation #12:

Stamp an endorsement on customer checks immediately after the checks have been batched and balanced. (Priority 2)

Recommendation #13:

Pre-number its cash receipt forms and periodically account for the cash receipt forms used. (Priority 3)

Recommendation #14:

Improve the segregation of cash custody, recording, depositing, and the preparation of cash reconciliations. (Priority 2)

Recommendation #15:

Complete its written procedures for (1) processing and recording installation fees and customer deposits, (2) reviewing daily cash receipts reconciliations, (3) identifying and pursuing delinquent accounts, and (4) documenting reconciliations and approvals. (Priority 3)

Finally, we recommend that the Department of Public Works/San Jose Municipal Water System and the Finance Department/Treasury Division:

Recommendation #16:

Include in its bid specifications for banking services in 1993 that the bank provide the SJMWS with either courier pickup at 3:00 p.m. or later or a lockbox service. (Priority 2)

OTHER PERTINENT INFORMATION

Analysis Of Excess Use Rates In The North San Jose And Alviso Service Areas

In July 1988, the San Jose Municipal Water System (SJMWS) began a water conservation program in the North San Jose and Alviso service areas and instituted an excess use charge rate structure. This was in response to the water conservation measures taken by the San Francisco Water Department (SFWD), who is the supplier for the North San Jose and Alviso service areas. Table V shows the incremental excess use charge applicable to the amount of excess water usage over the allotment.

TABLE V

INCREMENTAL EXCESS USE CHARGE APPLICABLE TO AMOUNT OF EXCESS WATER USAGE OVER THE ALLOTMENT FOR ALVISO AND NORTH SAN JOSE SERVICE AREAS

<u>If Excess Water Consumption Is:</u>	<u>The Excess Use Charge Will Be:</u>
Up to 5% over allotment	.64 times unit rate
5.01 - 10% over allotment	1.28 times unit rate
10.01 - 15% over allotment	2.56 times unit rate
15.01 - 20% over allotment	3.84 times unit rate
20.01 - 25% over allotment	5.12 times unit rate
25.01% + over allotment	6.40 times unit rate

Since the water conservation program was put into effect, the SJMWS has banked approximately two months worth of water allotment with the SFWD. Given the success of the water conservation program, the SJMWS plans on analyzing the possibility of adopting a \$2.00 per unit (one hundred cubic feet) excess use charge for the North San Jose and Alviso service areas, which is

consistent with other areas served by the SJMWS, instead of the rate structure shown above. In addition, the SJMWS will conduct an analysis to evaluate whether to recommend that the City of San Jose become a permanent customer of the SFWD Hetch Hetchy Water System. The SJMWS stated that they will conduct these two analyses early in 1993 as stated in Appendix F of this report.

Potential Sale Of The San Jose Municipal Water System

In March 1989, the City Council approved a memorandum that addressed the issue of the possible sale of the SJMWS. The background section of the memorandum stated that on September 14, 1988, the Environment Committee directed staff to "*prepare a comprehensive report regarding the possible sale of the System.*" The Environment Committee itemized specific questions and other SJMWS issues to be covered in the report.

Subsequently, the firm of Brown & Caldwell was engaged to provide engineering and economic analysis and the firm of KPMG Peat Marwick was engaged to provide financial comparisons relative to a possible sale of the SJMWS. The water companies chosen for comparison with the SJMWS were the San Jose Water Company, the Great Oaks Water Company, and the City of Sunnyvale Water System. These companies were chosen because they either served customers within the San Jose city limits, were cooperative, or were of comparable size to the SJMWS.

Brown & Caldwell's report included discussions of and conclusions on many engineering and supply issues. The firm's economic analysis included an evaluation of California Public Utilities Commission requirements as they affected the probable sale price of the SJMWS and how a privately owned public utility

would be allowed to recover its investment in rate charges. As the Environment Committee requested, Brown & Caldwell's Executive Summary included a matrix of the advantages and disadvantages of the City selling the SJMWS.

The KPMG Peat Marwick report included a comprehensive financial comparison of the SJMWS, the San Jose Water Company, the Great Oaks Water Company, and the City of Sunnyvale Water System. It also included an estimate of the amount of money the City would have to receive from the sale of the system and invest in order to provide earnings equivalent to those projected from continued operation of the SJMWS.

The conclusions reached from the two reports were as follows:

- The matrix of advantages and disadvantages that Brown & Caldwell prepared showed significantly more advantages to the City's retaining ownership of the SJMWS than selling it; and
- From the financial analysis KPMG Peat Marwick prepared, two significant conclusions were drawn: (1) The SJMWS was in good financial condition and was a healthy revenue enterprise for the City and (2) the unused capacity of the SJMWS represented a potential for increased earnings.

A full text of the Department of Public Works' memorandum on this subject is shown as Appendix E to this report.

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Administrator's Response

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E

Appendix F